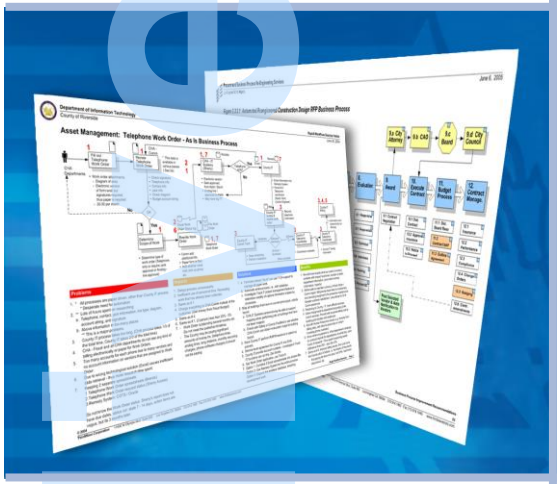
Deliverable

PROBLEMS IMPACTS SOLUTIONS BENEFITS

RAPID WORKFLOW®



Montana Department of Environmental Quality

Business Process Reengineering Services: DEQ's Permitting and Compliance Division, Waste & Underground Tank Management, Underground Storage Tanks

Implementation Plan & Process Maps
December 4, 2013

ThirdWave

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Section 1

Overview of BPR Initiative

1.1 Overview

Using the information produced in previous tasks, this document provides a conceptual BPR Implementation Plan. The Plan consists of the following:

- A narrative description of the BPR initiative;
- An implementation plan indicating a schedule for the implementation of BPR strategies; and,
- The finalized future state process maps of the processes under review.

This project entailed the Business Process Reengineering of five existing business processes:

1. Construction Permitting Process
2. UST Compliance Inspection with Operations & Maintenance Process
3. Oversight Inspection Process
4. Licensing Process
5. Operating Permit Process

The findings and recommendations document (Deliverable 4.2) identified the technical and functional requirements for a suite of applications to meet three major types of functionality that could be grouped into three categories:

- Permits and permitting
- Inspections, oversight and compliance

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- Applications

The applications shared a number of features and functions. The figure below illustrates the required features, sorted in descending order by those most mentioned in the Rapid Workflow workshops at the top.

Figure 1.1.1: Identified Features and Functions in Workshops

Required Features / Functions	No.	Workshops 1 2 3 4 5
Online Forms	5	
Reports	5	
E-Notifications	4	
Online Access to Outside Users	3	
Online Application: E-Permit, Application & Renewal	3	
E-Signatures	2	
Enterprise Content Management [1]	2	
Hand Drawn Figures	2	
Online Payment	2	
E-Letters: Reminders & Warnings, Permits,	2	
Automated Workflow	1	
Business Rules	1	
Check List of Conditions	1	
Compliance Inspections	1	
Enter/retrieve emails, calls, correspondence	1	
Imaging	1	
Licensee Exam Application (In development)	1	
Operating Permit Application	1	
Scheduling	1	
Spatial Component	1	
Status	1	
Upload Photos & GPS coordinates	1	

1. *Enterprise Content Management (ECMS) can include one or more of the following, even though Automated workflow and E-Signatures, and Imaging, when if added together would place ECMS at the top of the list with Online forms and Reports.*

Business and operational initiatives were also identified, they are addressed at the end of this document.

Section 2

Implementation Roadmap

2.1 Implementation Approach

The findings and recommendations document (Deliverable 4.2) identified the technical and functional requirements identified in the BPR workshops, which could be deployed in two different best practice approaches. For instance, they could be implemented:

- Using a competitive bidding process for Commercial-off-the- software
- Customer developed using a competitive bidding process
- Developed internally

This document presume that a commercial application will be procured with some custom development taking place for certain features, reports and application integration with existing systems.

Another consideration is whether to procure or develop one application per business process examined. An alternative to that approach would be to implement applications grouping several similar sets of features and functions (and associated interfaces to existing legacy systems) into a smaller group of applications.

The following provides a list of plusses and minuses for the implementation of each approach.

- **Develop / procure five distinct applications, one per business process:**

  The plusses include:
  - A highly customized set of features and functions per business process
  - Limited risk in the development and/or deployment of COTS applications can be contained to a phased approach, ensuring system stability prior to moving on to the next module

  Minuses include:
  - Possibly a longer implementation timeline
  - Disparate systems used for similar or related business processes, data collection and processing

- **Develop or procure a consolidated list of features and functions in a reduced number of distinct yet integrated modules**, i.e., Permits, Inspections, Applications, all part of the same homogenized application software.

  The plusses include:
  - A set of features and functions to meet per functional requirement
  - An application architecture that would foster expandability, i.e., features related to permitting could be added using the same application architect, which would apply to inspections and applications
  - Possibly shorter implementation timeline, since a number of SDLC activates could address all features and functions at the same time

  Minuses include:
  - Some additional risk to the development and/or implementation process, which would require additional (robust) project management and change management.

2.2 Implementation Timeline

For the purposes of this analysis, an implementation roadmap has been developed for the second approach, for DEQ's consideration. It should be noted that while the technical approach is based on commonly accepted systems development or implementation, technical approaches vary. The following project implementation roadmap starts after the procurement phase.

The following pages provides a graphical depiction of for the deployment of three application modules, an Enterprise Content Management System and the development of reports and application integration with existing systems over a fourteen (14) month timeline.

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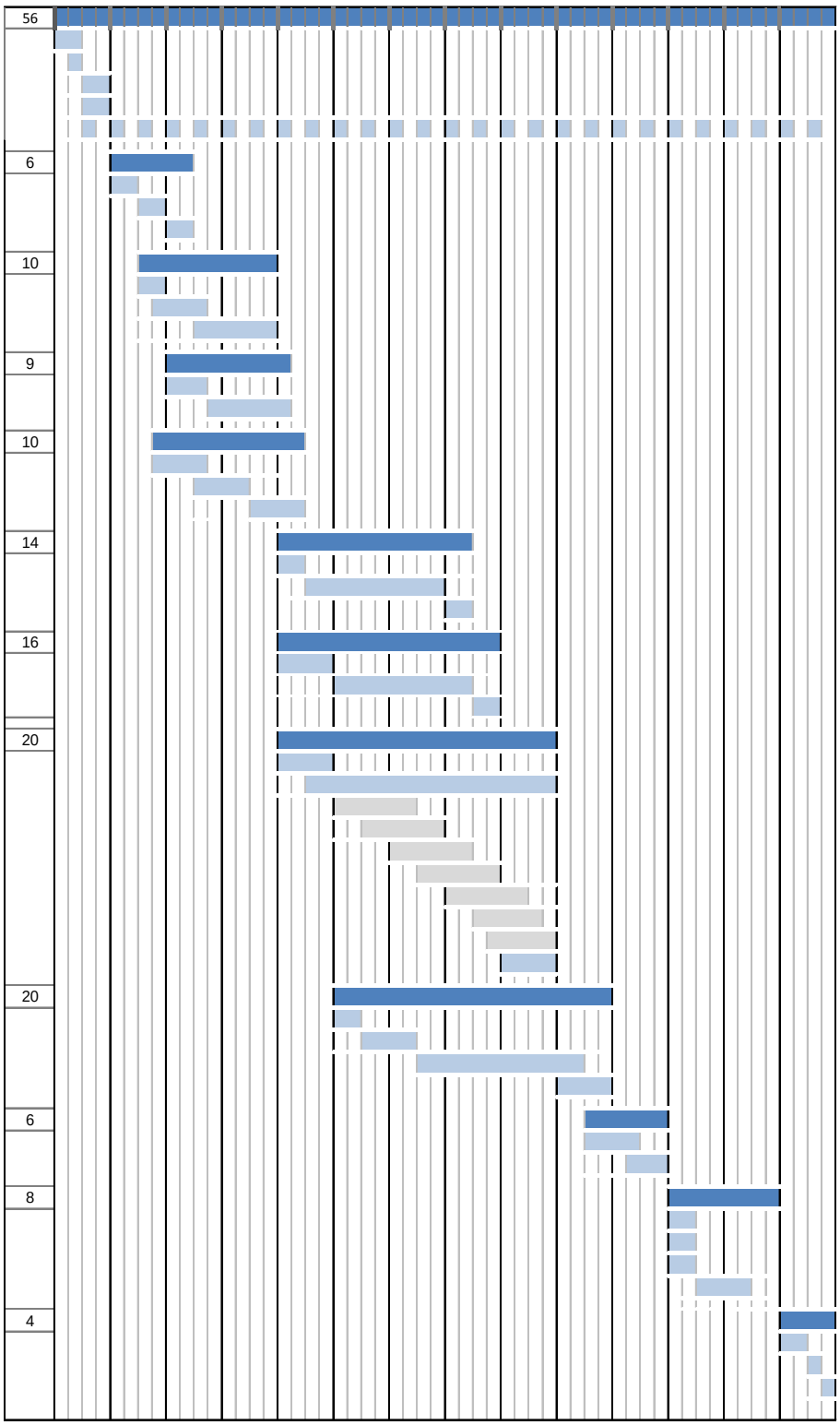
Figure 2.2.1: Representative Implementation Timeline

Phase/Task	Description	Wks.
Phase 1	**Project Initiaition & Management**	56
Task 1.1	Project Plan, Schedule & Charter	
Task 1.2	Project Kick-Off Meeting	
Task 1.3	Risk Management Plan	
Task 1.4	Change Management Plan	
Task 1.5	On-going Project Coordination & Managemeent	
Phase 2	**Discovery / Analysis**	6
Task 2.1	Functional/Data Conversion Discovery Analysis	
Task 2.2	Interface/Modification Discovery & Specification	
Task 2.3	Reports Discovery	
Phase 3	**Installation**	10
Task 3.1	Hardware: Develop, Test, Prod. Environments	
Task 3.2	System Configuration	
Task 3.3	Application Software	
Phase 4	**Conversion**	9
Task 4.1	Data Conversion Analysis	
Task 4.2	Data Conversion	
Phase 5	**Enterprise Content Management System**	10
Task 5.1	Design Specification	
Task 5.2	Configuration	
Task 5.3	Delivery / Testing	
Phase 6	**Automated Workflow Development**	14
Task 6.1	Design / Development Specification	
Task 6.2	Development	
Task 6.3	Delivery / Testing	
Phase 7	**Custom Reports Development**	16
Task 7.1	Design / Development Specification	
Task 7.2	Development	
Task 7.3	Delivery / Testing	
Phase 8	**Interfaces**	20
Task 8.1	Specification	
Task 8.2	Development	
	E-Pass: DOA (One directional, pull) (5)	
	RIMS: PTS, LBS, SRS, Petro (One dir., push) (4)	
	SIA: OFS (One directional, push) (2)	
	Permit Tracker	
	LIMS: Laboratory (One directional, pull)	
	E-Bill: DOA (One directional, push)	
	MOODLE: DOA (One directional, push)	
Task 8.3	Delivery / Testing	
Phase 9	**Software Testing**	20
Task 9.1	Test Plans & Scripts	
Task 9.2	Functional Testing	
Task 9.3	Integration Testing Cycle (ITC) - Unit, Integ., Regress.	
Task 9.4	User Acceptance Testing (UAT)	
Phase 10	**Documentation**	6
Task 10.1	System Documentation	
Task 10.2	Disaster Recovery Plan	
Phase 11	**Training**	8
Task 11.1	System Adminstration training	
Task 11.2	Core Team Training	
Task 11.3	End User Documentation	
Task 11.4	End User Role Based Training	
Phase 12	**Transition to Live**	4
Task 12.1	Cut Over Plan	
Task 12.2	Go Live	
Task 12.3	Start Post Go Live Support	



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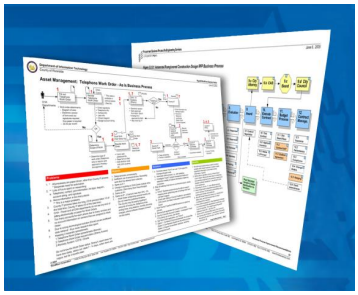
Section 3

Final Future State Business Process Maps

3.1 To-Be Business Process Maps

The following pages provides business process models for all of the applications identified in the five Rapid Workflow workshops.



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